

## **REMARKS**

After entry of the instant Amendment, claims 1-9 and 11-20 are pending in the instant application. Claim 10 was cancelled in a previous Amendment. Claims 1, 8, and 12 are amended to clarify that the instant treated kaolin containing silicone rubber composition is *free of* reinforcing fillers. As discussed with the Examiner in an interview, support for these amendments is at least found in paragraphs [0020], [0023] and [0032] of the specification as originally filed. Accordingly, these amendments satisfy 35 U.S.C. §112 ¶1 and do not introduce new matter.

### **Interview Summary:**

On January 22, 2009, the Applicant's attorney conducted a telephonic interview with the Examiner to discuss a pending 35 U.S.C. § 112 ¶ 1 rejection of the numerical definition of the terminology "substantially free" in independent claims 1, 8, and 12. The Examiner and the Applicant's attorney agreed that if the Applicant amended the claims to clarify that the treated kaolin containing silicone rubber composition is *free of* reinforcing fillers, the Examiner would withdraw the rejection.

### **Rejection of Claims 1-9 and 11-20 Under 35 U.S.C. § 112 ¶ 1:**

Claims 1-9 and 11-20 stand rejected under 35 U.S.C. § 112 ¶ 1 as failing to comply with the written description requirement. More specifically, the Examiner contends that the numerical further definition of "substantially free" is not supported by the specification and is considered to be new matter. As described immediately above, and as discussed with the Examiner, the Applicant has amended independent claims 1, 8, and 12 to remedy this rejection and to clarify that the treated kaolin containing silicone rubber composition is *free of* reinforcing fillers. Accordingly, the Applicant respectfully requests that the Examiner withdraw these rejections.

## **Rejection of Claims 1-9 & 11-20 Under 35 U.S.C. §103 Over Woerner In View of Cornelius**

Claims 1-9 and 11-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Woerner et al. (U.S. Pat. No. 6,737,458) in view of Cornelius et al. (U.S. Pat. No. 4,677,141). The Applicant once again respectfully disagrees with this combination and submits that the ‘458 and ‘141 patents expressly teach away from this instant invention such that no one of skill in the art would “obviously” combine these references. The Applicant also respectfully asserts that even upon combination, there still is no reasonable expectation of success in arriving at the instant invention from the combination of these references.

### **Teaching Away From This Invention:**

First and foremost, the ‘458 and ‘141 patents both teach away from this invention because each utilizes *reinforcing* fillers to form silicone compositions with sufficient physical and mechanical strength.<sup>1</sup> The silicone composition of this invention has similar physical and mechanical strength but utilizes different technology (i.e., a non-reinforcing treated kaolin filler) that is both cheaper and easier to use. In fact, the claims of this invention positively recite and require that the silicone composition is free of reinforcing fillers. This is in direct opposition to the ‘458 and ‘141 patents. Accordingly, it would not be obvious to one of skill in the art to combine the ‘458 and ‘141 patents, especially when both references utilize different technology than this invention and the combination of those references would result in a more expensive silicone composition that is difficult to form.

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<sup>1</sup> The ‘458 patent also uses non-reinforcing fillers but utilizes reinforcing fillers to provide the silicone compositions with sufficient physical and mechanical strength. (See, for example, the Abstract and Claims.)

The ‘458 Patent:

The ‘458 patent describes forming a silicone composition including “actively reinforcing fillers” such as fumed (pyrogenic) silica and precipitated silica to increase mechanical strength of a final product (e.g. vulcanized silicone rubber). (See Col. 6, lines 39-52). The ‘458 patent also states that the silicone composition *preferably* includes from 5 to 60 percent by weight and *more preferably* from 10 to 40 percent by weight of the reinforcing fillers. This preferred inclusion of the reinforcing fillers for increasing the mechanical strength of silicone rubbers makes it clear that the silicone compositions taught in the ‘458 patent require reinforcing fillers so that the final silicone rubber products have sufficient physical and mechanical strength. Said differently, reinforcing fillers must be used in the ‘458 patent because use of non-reinforcing fillers<sup>2</sup> alone is not enough. Thus, no one of skill in the art would look to the reinforcing fillers of the ‘458 patent to form the instant invention that is free of such fillers.

The ‘141 Patent:

The ‘141 patent also focuses on forming a silicone composition with reinforcing fillers. In fact, in the specification, examples, and claims, the ‘141 patent uses “reinforcing silica filler” in amounts of from 10 to 100 parts by weight per 100 parts by weight of a polydiorganosiloxane. The silica reinforcing filler is used to “improve the physical strength” of the silicone composition. (See Col. 3, Lines 6-7). Just as above, that the ‘141 patent makes clear that reinforcing fillers must be used in order to form silicone compositions with sufficient physical and mechanical strength.<sup>3</sup> Again, no one of skill in the art would look to the reinforcing fillers of the ‘141 patent to form the instant invention that is free of such fillers.

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<sup>2</sup> *Id.*

<sup>3</sup> See also Examples 1, 2, 5, 6, and 7 and the claims of the ‘141 patent

No Reasonable Expectation of Success:

Even upon combination of the ‘458 and ‘141 patents, there still is no reasonable expectation of success in arriving at the instant invention. Quite simply, combining these references produces a silicone composition that includes silica reinforcing fillers that are both expensive and difficult to use. Formation of this type of composition cannot be considered “successful,” especially in view of the instant composition which has excellent physical properties and is formed with less expense and in a less time consuming manner.

It is well known in the art that silica reinforcing fillers, such as those of the ‘458 and ‘141 patents, are much more expensive than non-reinforcing fillers, such as the kaolin of the instant invention. It is also well known in the art, and described in the ‘141 patent<sup>4</sup> itself, that when silica reinforcing fillers are used in silicone compositions, care must be taken to avoid crepe hardening<sup>5</sup> through use of heat or other treatment methods. The need to protect against crepe hardening increases production times and costs on top of the already expensive silica reinforcing filler. Thus, there is no reasonable expectation of success in arriving at the instant invention through the combination of the ‘458 and ‘141 patents.

In fact, the Applicant already contemplated using the technology of the ‘141 patent and specifically disregarded use of such technology because it generally requires use of heat and because the silica reinforcing fillers are expensive, as described above (see also paragraphs [0008] and [0032] of the instant specification as originally filed). In other words, those of skill in the art have already reviewed the ‘141 patent in detail, determined that the technology of this patent was insufficient and should be replaced, and have specifically designed the instant invention to replace such technology.

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<sup>4</sup> See Col. 3, Lines 29-50

<sup>5</sup> Crepe hardening occurs when silica reinforcing fillers form hydrogen bonds with silicones resulting in formation of high viscosity fluids that turn into glassy brittle solids.

In view of the instant Amendment and clarification of this invention as claimed is *free of* reinforcing fillers, the Applicant respectfully submits that the Examiner's combination of the '458 and '141 patents is misplaced. Thus, the Applicant respectfully requests that the Examiner withdraw the pending rejections and allow the claims.

### **Conclusion**

In view of the above, the Applicant respectfully submits that the claim rejections under 35 U.S.C. §§ 103 are overcome, and that all pending claims are both novel and non-obvious. Accordingly, the Applicant respectfully submits that all pending claims are in condition for allowance, and respectfully requests such allowance.

While it is believed that no additional fees are presently due, the Commissioner is authorized to charge the Deposit Account No. 08-2789, in the name of Howard & Howard Attorneys PLLC, for any fees or credit the account for any overpayment.

Respectfully submitted,

**HOWARD & HOWARD ATTORNEYS PLLC**

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Date

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